



No.	Author	Date
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	Title 2007 Woodcock Singing Ground Survey	

Abstract: *Four male American woodcock were heard singing on 3 of 19 survey routes in Indiana during 2007. This compares to 2 heard along 1 of 17 survey routes in 2005. Since 1968, the number of woodcock heard singing during surveys has declined an average of 7.4% in Indiana, whereas only a 1.8% per year decline has been observed for the entire central management region. The continuing loss of early successional, moist soil, woodland habitats, in breeding, migratory routes, and over-winter areas, is thought to be the primary cause for this decline.*

The American woodcock is a popular game bird throughout much of the Midwest, particularly with ruffed grouse hunters. Because of its migratory nature the U. S. Fish and Wildlife Service (USFWS) is responsible for its management. The USFWS with cooperation of state fish and game agencies conducts annual counts of displaying woodcock during the birds peak display period. Data from these surveys are used to monitor population trends in 2 survey regions; the eastern and central regions. Indiana is 1 of 6 states in the central management region participating in the annual surveys. The other participating states in the central region are Minnesota, Wisconsin, Michigan, Illinois, and Ohio. The Indiana Division of Fish and Wildlife has cooperated with the American woodcock survey since its inception in 1968.

METHODS

The Office of Migratory Bird Management of the USFWS assigns survey routes and procedures for each state. Each route is 3.6 miles in length and includes 10 listening stops. Beginning shortly after sunset, participants count the number of woodcock heard peenting (vocalization of displaying male woodcock) at each stop. In 2007, Indiana was assigned 20 routes to be surveyed between April 15 and May 5. Surveys were not conducted when temperatures dropped below 40° F, during rain, or when winds exceeded 12 mph.

RESULTS

Four woodcock were heard on 3 of 19 routes completed in 2007 (Table 1) as compared to 2 woodcock heard on 1 of 17 routes surveyed in 2006. One 2007 route was censored from the data analysis because a couple stops along the route could not be surveyed. Five routes were common to both years with 1 bird heard in 2007 on those routes surveyed in 2006. Based on Kelley et al. (2007), the number of woodcock heard in Indiana has declined by an average of 7.4% per year from 1968-2006 (Figure 1). This decline is considerably greater than the 1.8% per year decline estimated for the entire central management unit over the same time period.



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DISCUSSION

Like other upland game birds in Indiana, the number of American woodcock hunters encounter each fall has progressively declined over the last 3 decades. Like ruffed grouse, woodcock favor early successional woodlands associated with forest manipulation. In addition, habitat requirements for woodcock are more specific than those for ruffed grouse in that early successional habitats are most utilized when they contain areas of moist soils. Moist soil is essential for woodcock because they feed by probing their beak into the ground to find grubs and earthworms. Unfortunately, the reduction in timber harvest on our public and private lands has caused a decrease in the amount of habitat available to American woodcock and ruffed grouse. Without forest manipulation such as logging and fire, early successional habitats will continue to be lost and populations of American woodcock and ruffed grouse will continue to decline.

LITERATURE CITED

Kelley, J.R., Jr., R. D. Rau, and K. Parker. 2007. American woodcock population status, 2007. U. S. Fish and Wildlife Service, Laurel, Maryland. 17 pp.
or
<http://www.fws.gov/migratorybirds/reports/reports.html>

Table 1. Number of male American woodcock heard singing along Indiana survey routes in 2005 to 2007.

Route No.	County	2005	2006	2007
1	St. Joseph	NS	NS	0
3	Elkhart	NS ^a	0	NS
5	Steuben	NS	NS	0
7	Porter	0	NS	NS
10	Kosciusko	NS	0	NS
11	Noble	NS	0	NS
13	LaPorte	0	NS	NS
14	Jasper/Starke	2	0	1
16	Whitley	0	0	NS
17	Fulton/Pulaski	NS	2	1
18	Adams	0	0	NS
19	Newton	NS	NS	0
20	White	2	0	0
23	Wells	3	0	0
26	Tipton	NS	0	NS
28	Jay	0	NS	NS
29	Fountain	NS	NS	0
34	Vermillion	NS	NS	0
35	Montgomery	NS	NS	0
36	Henry-Wayne	NS	NS	0
37	Wayne	NS	NS	0
38	Hendricks	NS	NS	0
46	Johnson	NS	NS	2
47	Sullivan	NS	0	NS
51	Ripley	NS	0	NS
53	Dearborn	NS	NS	0
54	Knox	NS	0	NS
55	Jackson	1	0	0
56	Jennings	NS	0	Censored ^b
59	Jefferson	NS	NS	NS
60	Switzerland	NS	NS	0
63	Pike	NS	NS	0
77	Delaware	0	NS	NS
79	Harrison	NS	0	NS
81	Warrick	NS	NS	0
84	Carroll	0	0	NS
Males Heard	Statewide	8	2	4
Number of routes conducted		11	17	19

^a NS = not surveyed.

^b Censored: route removed from data analysis for incomplete data.

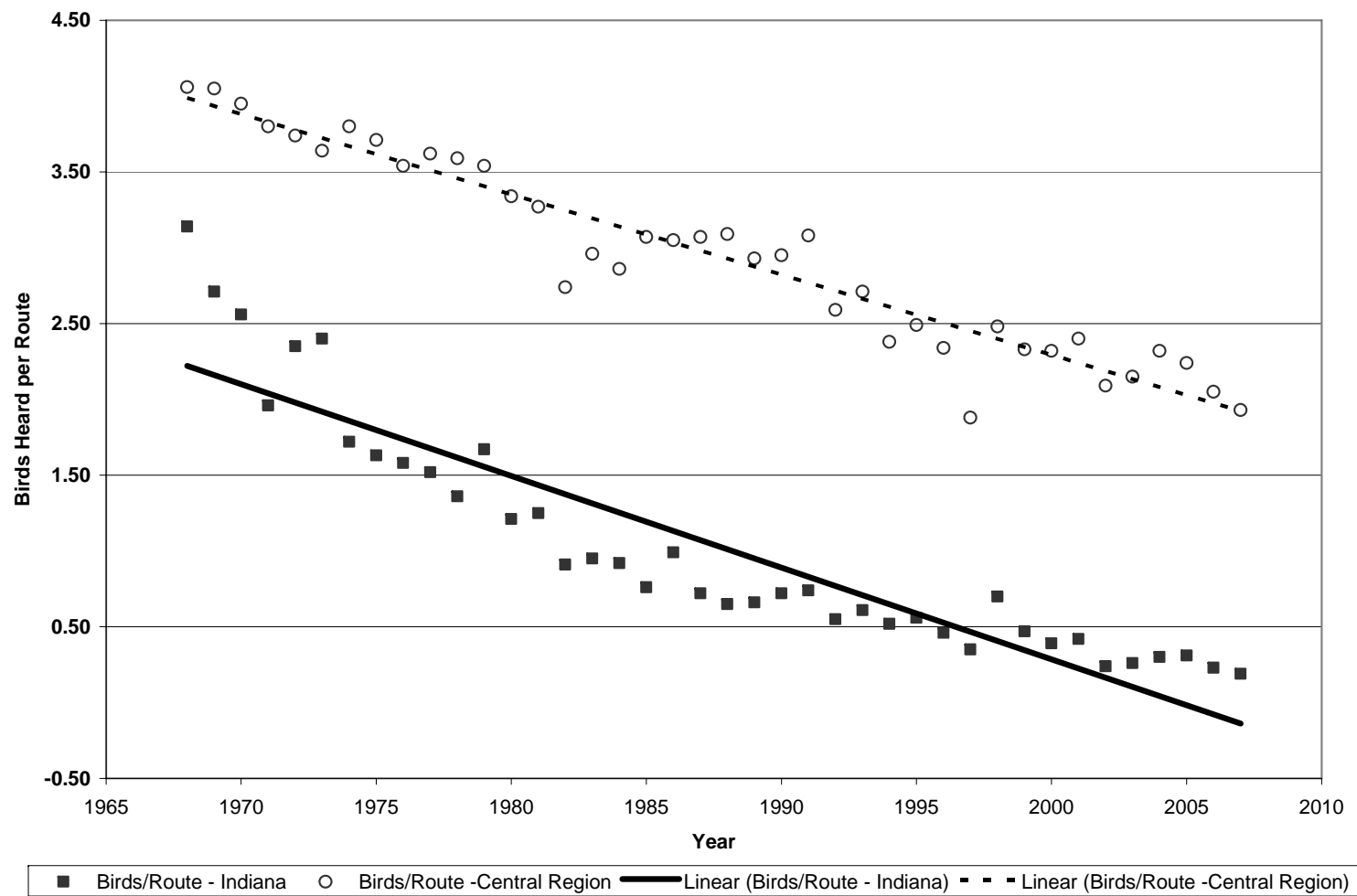


Figure 1. Number of male woodcock heard singing per survey route in Indiana and the entire central management region. The central management region includes Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin (Kelley et al. 2007).